

# Lake Boon 2022 Project Update

By: Dominic Meringolo  
Project Manager

SOLITUDE  
LAKE MANAGEMENT

Restoring Balance. Enhancing Beauty.



## 2021 PROGRAM CHRONOLOGY

- Received MA DEP License to Apply Chemicals
- Pre-treatment survey conducted
- Diquat herbicide treatment performed
- Post Treatment survey conducted

04/02/21

05/07/21

06/02/21

09/08/21



**Commonwealth of Massachusetts**  
Executive Office of Energy and Environmental Affairs  
**Department of Environmental Protection**  
One Winter Street Boston, MA 02108 • 617-292-5500

Kathleen A. Theoharides  
Secretary

Martin S. Suberg  
Commissioner

Charles D. Baker  
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Karyn E. Polito  
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License No.: **WM04-0000407**

**LICENSE TO APPLY CHEMICALS FOR CONTROL OF  
NUISANCE AQUATIC VEGETATION**

**Applicant: KEITH RICHARD GAZAILLE**  
**Name of Waterbody: LAKE BOON**  
**Location of Waterbody: HUDSON**  
**Project Proponent: LAKE BOON COMMISSION**


**AUTHORITY FOR ISSUANCE**

Pursuant to the authority granted to the Department of Environmental Protection, by Massachusetts G.L.c. 111, c5E, the following license is hereby issued to **Keith Gazaille, SOLitude Lake Management** (hereinafter called the "licensee"), authorizing the application of chemicals for the control of nutrients, algae or aquatic plants to **LAKE BOON, HUDSON**; such authorization being expressly conditional on compliance by the licensee with all terms and conditions of the license hereinafter set forth. This license shall become effective on the date of the Director's signature and shall expire on the **12/31/2021**.

Sincerely,



License Effective Date: **04/02/2021**



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**A. Application Condition(s)**

**Chemical Information**

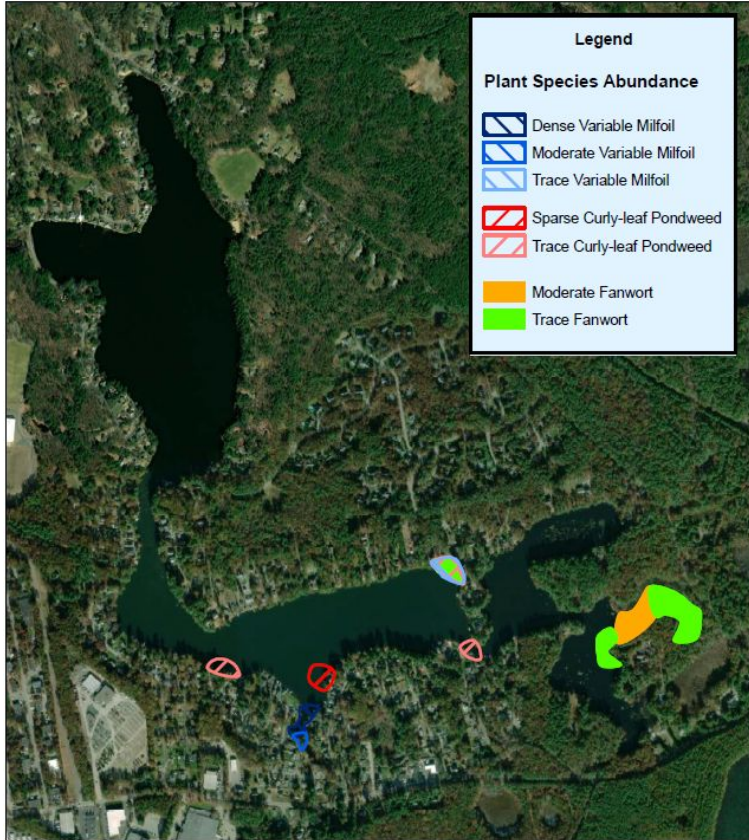
| Product Brand Name/Trade Name | Chemical Form (dry/liquid) | Total Weight/Volume Applied | Units of Measurement (lbs/gallons) | Acres Treated | Application Rate | Planned Maximum Concentration (ppm) |
|-------------------------------|----------------------------|-----------------------------|------------------------------------|---------------|------------------|-------------------------------------|
| SonarONE                      | Dry                        | 1780 lbs                    | lbs                                | 50            | 35.6 lbs/ac      | 0.06                                |
| Sonar Genesis                 | Liquid                     | 59 gal                      | gal                                | 50            | 1.2 gal/ac       | 0.02                                |
| Tribune                       | Liquid                     | 112.5 gal                   | gal                                | 75            | 1.5 gal/ac       | 0.25                                |
| Copper Sulfate                | Dry                        | 352 lbs                     | lbs                                | 40            | 8.8 lbs/ac       | 0.3                                 |

**Treatment Method:** Liquid herbicides/algaeicides are diluted 50-100:1 with lake water and sprayed uniformly from a boat either 1) upon the surface or 2) injected beneath the water's surface with weighted hoses. Dry copper sulfate is first dissolved and sprayed as a dilute liquid formulation on the surface as described above. Granular formulations are dispersed upon the water's surface by a calibrated cyclone spreader mounted on the bow of the treatment boat.

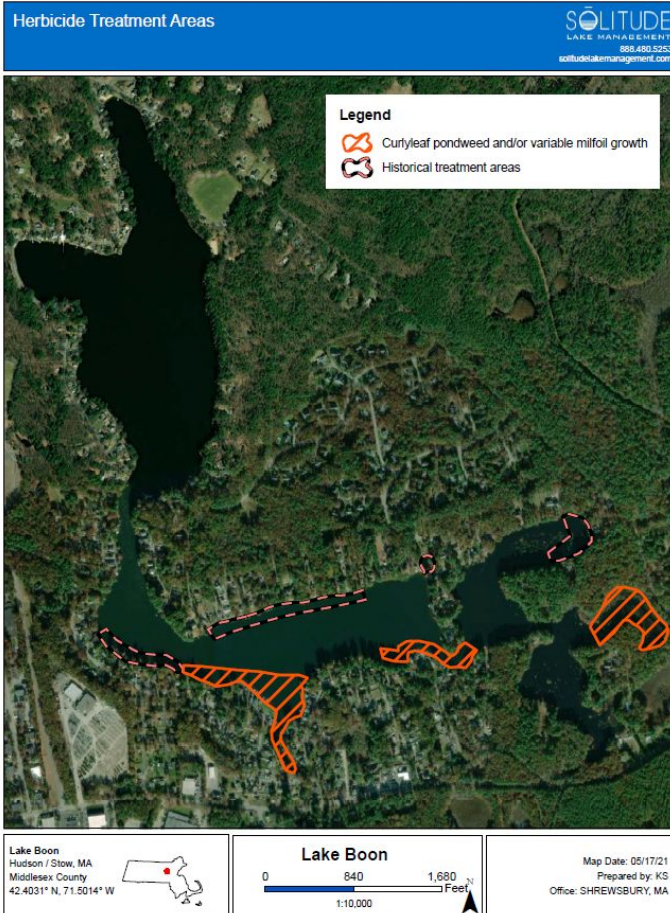
**# of Treatments Requested:**  
 SonarONE: 2  
 Sonar Genesis: 2  
 Tribune: 2  
 Copper Sulfate: 2

Pre Treatment Relative Abundance of Invasive Species

888.480.5253  
southdakotamanagement.com

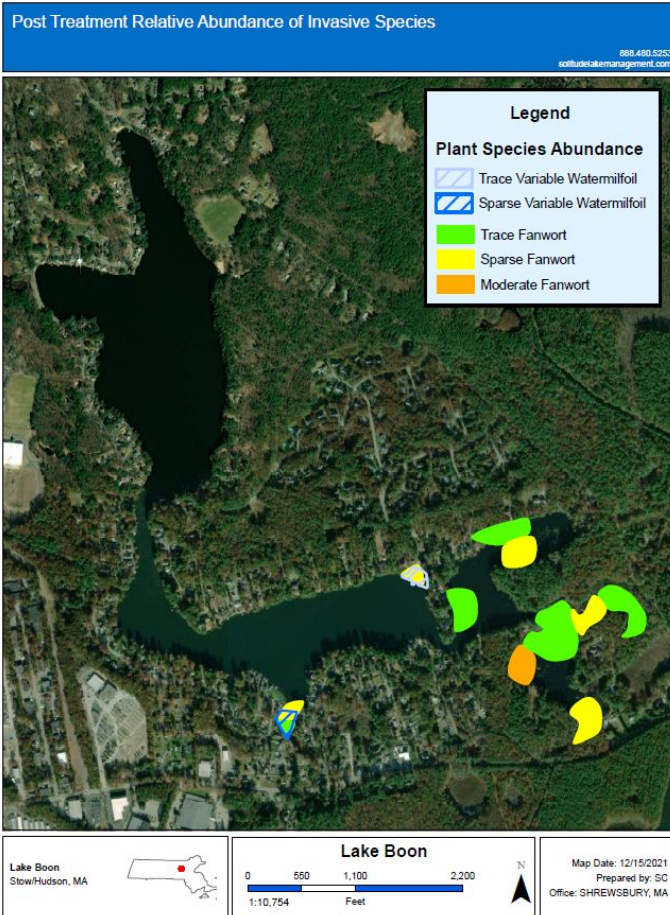


- Conducted on May 7th
- Survey data collected at 30 predetermined points
- Presence of curlyleaf pondweed (CLP), variable milfoil and fanwort
- Data used to designate treatment areas (targeting CLP and milfoil)



- Conducted on June 2nd
- Treated 30 acres with diquat herbicide
- Used 44 gallons of Tribune (diquat)





- Conducted on September 8th
- General littoral zone survey and collected at 30 predetermined points
- Observed expanding fanwort in Basin 3 & 4 with varying density
- Fanwort and sparse milfoil in Monahan's Cove and Hale Road Cove



- **Healthy Lake Boon Initiative (HLBI)**
  - **Collaborate to adjust treatment approach/plan**
  - **Use data and model to assist in evaluating plant management**
- **Add more defined data points (>30)**
- **Start treatments early when biomass is low and plants are more sensitive**
- **Multiple survey events, reports and updates (early, mid, late)**



- **Obtain MassDEP Permit**

- **Vegetation Surveys**

- **Pre Survey (May)**
- **Mid Season (July)**
- **Post Survey (September)**

- Littoral Zone & Predetermined Points
- Measurement of water clarity (Secchi disk) and temperature/dissolved oxygen profile

- **Herbicide Treatment**

- **Sonar (fluridone) for fanwort**
- **Tribune (diquat) for milfoil/CLP**

- Sonar Treatment in Basin 2 Coves, Basin 3 & 4 - Based on 2021 Post Survey and historical patterns
- Initial and 2-3 booster applications
- Interim Surveys & Sampling
- Timing
  - Late April/Early May start
  - Will not necessarily wait for pre survey
  - Booster treatments 3-6 weeks apart

- **Reporting**

- Based on pre-survey
- Target CLP and milfoil outside Sonar treatment areas

# Questions?

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